

What is claimed is:

1. A process for the vulcanization of a pneumatic tire comprising a tread portion, a pair of sidewall portions and a pair of bead portions which comprises conducting the venting in a portion of a tire placed in a vulcanization mold prior to vulcanization and corresponding to the sidewall portion in at least one place in a radial direction of the tire.

2. A vulcanization mold for the pneumatic tire comprising a tread ring comprised of plural segments reciprocatively displacing in a radial direction and contributing to shape a tread portion, a pair of side portion rings mainly contributing to shape a pair of sidewall portions, and a bead portion ring contributing to shape a bead portion, in which a venting gap is arranged in at least one place of the side portion ring in the radial direction so as to extend over a full circumference of the ring and pass through the ring from the inside toward the outside thereof.

3. A vulcanization mold according to claim 2, wherein the venting gap is disposed in a position of forming a bead guard of the pneumatic tire for preventing the rubbing to a rim flange.

4. A vulcanization mold according to claim 2, wherein the venting gap is disposed in at least one of a position corresponding to a turnup end of a carcass ply in a shaped tire to be placed in the mold, a position corresponding to an outer end of a bead filler in a radial direction and a position corresponding to a neighborhood of a side edge of a tread portion.

5. A vulcanization mold according to claim 2, wherein the venting gap has a clearance of 10-30  $\mu\text{m}$ .

6. A vulcanization mold according to claim 2, wherein a plurality of fine grooves introducing the gas in the mold into the venting gap in an inner part of the side portion ring are arranged at both inward and outward sides with respect to the venting gap in the radial direction.

7. A vulcanization mold according to claim 2, wherein the venting gap is formed between sub-rings positioned inward and outward in the radial direction and integrally united with each other to constitute the side portion ring.

8. A vulcanization mold according to claim 2, wherein the venting gaps are formed among plural sub-rings placed inward and outward in the radial direction so as to constitute the side portion ring, and opposed surfaces of the mutual sub-rings

TOP SECRET - PROPRIETARY INFORMATION

are slant faces inclining with respect to the radial direction, and at least one sub-ring among these sub-rings is energized by a spring or the like so as to enlarge the venting gap.

*Suba* 9. A vulcanization mold according to claim 7 or 8, wherein a chamfered portion or a notched portion communicating with the venting gap is arranged in a surface of at least one sub-ring among the adjoining sub-rings placed inward and outward in the radial direction contacting with the tire before the vulcanization.

*add a<sup>2</sup>*

TOP SECRET - 100-22660